Contractor's Report to the Board

The Feasibility, Constructability, and Efficacy of Tire-Derived Aggregate as a Component in Slurry Cutoff Walls

Produced under contract by:
CSU, Chico Research Foundation

CALIFORNIA STATE UNIVERSITY, CHICO

June 2006

Appendix E
Laboratory Test Results

California Environmental Protection Agency
Integrated Waste Management Board

VECTOR
ENGINEERING, INC.

LABORATORY TRANSMITTAL

DATE: October 22, 1999

JOB NO: 973016.01 **LAB LOG:** 137.0

TO: Richard G. Holman
California State University, Chico
Department of Construction Management
Chico CA 95929-6355

cc: Bruce Yoakum
Same

RE: Laboratory Testing: Recycled Tire Slurry Wall

Enclosed are result for:

Code	Item	Quantity
	Hydraulic Conductivity, D-5084-12"	6
	Compressive Strength, D-2166- 12"	11
	Hydraulic Conductivity, D-5084- 2"	1
	Compressive Strength, D-2166- 2"	4
	Construction of 12" molds, 7-12x12 & 14 12x24	21

Kenneth R. Criley
Technical Director

12438 Loma Rica Dr., Suite C • Grass Valley, CA 95945 • (530) 272-2448 Fax: (530) 272-8533
MENDOZA & BUENOS AIRES, ARGENTINA • SANTIAGO, CHILE

VECTOR
ENGINEERING, INC.

October 22, 1999
Project No: 973016.01

Richard G. Holman
California State University, Chico
Department of Construction Management
Chico, CA 95929-6355

Re: Laboratory Services, Recycled Tire Slurry Wall Project

Dear Richard:

Our laboratory has completed testing for the referenced project. The testing program included tests to measure the hydraulic conductivity and strength characteristics of test samples obtained from field mixes, during construction of the slurry wall.

Enclosed are 7 Hydraulic Conductivity and 15 Unconfined Compressive Strength tests. The tests were conducted on 12-inch diameter specimens. The specimens were fabricated at the project site near Gridley California, and later transported to our Grass Valley lab for these tests.

The test program required fabrication of test samples from on site mixes for each day of production, and casting multiple specimens for strength and hydraulic conductivity tests at 7 and 28 days of curing age. Representatives from Chico State performed the sampling and specimen fabrication. After curing for at least 3 days these specimens were delivered to Vector's laboratory for testing.

Our laboratory encountered some difficulties in conducting the hydraulic conductivity tests at the scheduled 7 and 28 day, however the strength tests were performed as requested. The Hydraulic Conductivity tests required several weeks of individual specimen cell time. With only three cells and other problems, actual 7 and 28-day test results were not determined, and test results were obtained at various curing times from 7 to 50 days of age. The long test times were due to the size of the test samples and some equipment problems. Difficulties were encountered with wires from the tires puncturing the test membranes, which required several cell and sample repairs.

I apologize for the delay in this report. Please call me if you have any comments or question.

Sincerely Yours
Vector Engineer Inc.

Kenneth R. Criley
Director of Laboratory Services

Labexcell / Lab-word / letters / chico-tires-final

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